Annual Report of the Joint Director of Public Health
2011-2012
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We are in an era of significant upheaval for public services. The Health and Social Care Act signals changes, not only to the organisation and funding of NHS services, but also to the management of public health, to the way in which we measure health outcomes, to more local accountability for addressing inequalities and to a re-balancing of responsibility for health towards the individual and away from the State.

While we are in the process of designing this new system, it becomes even more important that we continue to deliver effective programmes to improve health, minimise the risks to services that keep the population safe and work to mitigate the effects of the economic downturn.

In this report we illustrate how we are continuing to focus on the identified health needs of the population as well as welcoming the opportunities we will have as part of the local authority to act on the root causes of poor health.

During the last twelve months, we have seen improvements to several of our key indicators of health. We are making good progress in reducing death rates in Liverpool residents. We have again achieved our target for the numbers of residents quitting smoking. We have seen a reduction in the number of alcohol related hospital admissions and the rate of teenage pregnancies has also declined. We have also lobbied successfully across Liverpool City Region for Government support for a minimum unit price for alcohol.

The recent outbreak of measles across Merseyside has highlighted the value of the good systems we have in place to respond to unexpected incidents, including outbreaks of infectious disease. While there have been over 400 confirmed cases of measles across Merseyside in recent months, the number of people affected would have been many times greater if we had not achieved the very high percentage of vaccination in young children who are now protected against this disease.
The new Liverpool Health and Wellbeing Board has been set up and has an important role in setting the health strategy for the city with commitment from City Council, NHS and the voluntary and community sector. Based on what we know about local health needs, the priorities agreed by the Board will be: addressing child poverty; mental health; cancer; and alcohol misuse. During the next twelve months we would like to engage with organisations, communities and individuals across the city in identifying the most effective ways to tackle these issues.

We are now well into our Decade of Health and Wellbeing and the 2020 logo has been very prominent during the last twelve months in the enormous number of community activities, city centre events and NHS initiatives which contribute to the five ways to wellbeing.

I hope we can continue to promote the vision of 2020 in the coming years as we all recognise that our individual and collective wellbeing is even more important in hardship and uncertainty.

Dr. Paula Grey
Joint Director of Public Health

July 2012
Chapter One

100 years ago: Report on the health of the City of Liverpool 1912

When Dr. E.W. Hope presented his report for 1912 to the Health Committee, he was able to demonstrate how the city was making progress in its fight against disease.

Death rates were dropping significantly, and included the deaths of those people coming into the city as migrants or seeking care in the city hospitals. The implication is that living conditions were improving appreciably.

**City of Liverpool**

**Infant mortality per 1,000 Births 1893-1912**

**Infant mortality**

Compared with 2012, death rates in 1912 were high. Infant deaths were a big factor. In 1912 the infant mortality (below age 1) death rate was 125 per thousand live births - one in eight infants.

The 2008-2010 rate for Liverpool was 5.2 deaths per thousand live births.

The main causes of death were different in 1912 compared with today. Communicable diseases were the big killers, and understanding of what caused the illnesses and how they could be countered was at an early stage. The killers of today - cancers and heart disease - were present, but many people did not live long enough to develop them.
Health Inequalities across the city

Although the causes of death and illness have changed over time, the health inequalities faced by different areas within the city have persisted. In 1912 the highest death rates were in North Liverpool in Scotland and Exchange wards where deaths ran at 28 per thousand population.

In Fazakerly, incorporated into the city in 1905, the death rate was two thirds lower, at 9 per thousand population. Today the comparable measure shows similar inequalities across the city with the difference in estimated life expectancy at birth for females at 8.1 years and males at 11.0 years between the most and least deprived areas of the city.

Measles epidemic

A measles epidemic raged in Liverpool in 1912. 8075 cases were reported with 877 people dying, the great majority being under the age of 3 years. In 1912 there was no vaccination available to give immunity, and little in the way of treatment. Measles was a routine cause of death even when not an epidemic - the previous year it had claimed the lives of 327 people.

The report of 1912 describes the difficulty of isolating very small children in hospital when their mothers had to look after the rest of their families. The distribution of measles deaths reflected the pattern of social conditions, with wards in the north (Everton, Scotland) having the highest death rates and more leafy wards (Toxteth East and West Derby) a lower rate.

The beginning of 2012 saw an outbreak of measles in Merseyside. It seems shocking that a communicable disease which can cause disability or death should affect large numbers in our city today when it can be prevented by vaccination. Incorrect and damaging publicity that the MMR (Mumps, Measles and Rubella vaccination) vaccine was potentially harmful led to thousands of children not being immunised in the early to mid 1990s. Coverage of MMR today in Liverpool is high (92.1% 2010/11) but there are many who were not immunised in the past who are at risk of contracting the virus.

References

1 Medical Officer of Health report of the Health of the City of Liverpool, during 1912, Health department
Chapter Two

Health Protection

Protecting the health of the public continues to be a key activity for Public Health in the 21st century. While non-communicable diseases are the most significant causes of mortality in 2012, communicable diseases continue to be an underlying threat. These are now largely preventable through a range of interventions including vaccination and immunisation.

Measles 2012

We have had a stark reminder of the importance of maintaining very high levels of MMR vaccination with a large outbreak of measles in Liverpool and surrounding areas during the first half of 2012. The outbreak began in January. By the end of July, there were 403 laboratory confirmed cases across Cheshire and Merseyside and a further 171 probable cases under investigation. Almost two thirds of the confirmed cases were in Liverpool.

The outbreak has affected children and young adults. Half of the cases have been young children under 5 years old. Around a third of the cases have been young adults from 15 years old. Almost all of those affected were not fully vaccinated.

By the end of July, 87 people had been treated in hospital. Fortunately, at time of writing, there have been no deaths. The need for hospitalisation has been greatest amongst the very young and the over 15s, with 1 in 4 in these age groups needing a stay in hospital.

The outbreak was at its height in March, causing significant pressure on the NHS and public health service. The rate of spread has been slowing since May but has not yet stopped.

Public health response

The control of the outbreak has been overseen by a specially established outbreak team to ensure a coordinated response, with representation from key organisations, including public health, the Health Protection Agency (HPA), primary care, Liverpool Community Health, hospitals, the Local Authority and neighbouring Primary Care Trusts.
The initial public health focus of the outbreak was to actively follow up contacts of cases and offer them urgent protection through immunoglobulin or vaccination if needed. In April, the focus shifted to identifying and protecting those contacts of cases who were at increased risk of serious illness from measles. Protecting people with poor immune systems who come in contact with measles remains the top priority together with protecting pregnant women in contact with measles.

The other very important control measure is to continue to encourage families of children and young adults who were not fully vaccinated to protect themselves with two doses of the MMR vaccine and get the message across that ‘it is never too late to protect yourself.’ Health professionals, including GPs, health visitors and school nurses worked together to promote the vaccine and to make it as easy as possible for people to take the opportunity to be vaccinated.

There has been extensive coverage of the outbreak in the media which has been helpful in raising awareness of the importance of vaccination. Over 900 children and young people aged from 5 to 24 who had previously missed out were given the MMR vaccine in March.

Measles can be difficult to distinguish from other causes of fever and rash in children and young people, until confirmed by laboratory tests. Clinicians notified over 1000 possible cases to the HPA which required investigating and testing. To manage the intense workload, local public health teams supported a Measles Emergency Operations Centre set up by the HPA during March.

NHS community staff followed up cases in nurseries, schools and primary care settings. The outbreak has had an impact on NHS services with an increase in consultations in A&E departments and walk-in centres and primary care. Health services had to deal with the challenge of isolating patients presenting with fever and rash to protect others. This caused significant pressure on Alder Hey Children’s Hospital due to large numbers of children presenting in A&E with fever and rash. The pressure on the NHS eased considerably in April and May with fewer hospitalisations and consultations.
Vaccination protecting health

The relatively high MMR vaccination rates in Merseyside have protected the population from a larger outbreak. It is likely that the rate of spread of measles would have been much higher if fewer children had been protected by MMR.

MMR vaccine is offered to all children as part of the routine childhood immunisation programme to protect against measles, mumps and rubella. Very high uptake of around 95% is important to prevent outbreaks. There has been a steady rise in MMR uptake rates in recent years.

The vaccine is well accepted by parents and guardians. 95% of children in Liverpool have had their first dose of MMR by their second birthday. (Data from January to March 2012).

Children should get a second dose of MMR vaccine before they start school, and currently, almost 9 out of 10 Liverpool children are fully protected by their fifth birthday. Uptake has been lower in the past and many older children, teenagers and young adults have not been fully protected, leaving them vulnerable to measles, mumps and rubella.

Recommendations

• The measles outbreak has highlighted the importance of agencies working together to prevent and control outbreaks. This partnership working needs to be protected through the current major changes in the health and public health systems.

• Maintain and improve high vaccination rates. Promote vaccination for children and young adults who were not vaccinated as children.

• Identify variation in vaccination take up and reduce inequitable access.
Chapter Three

Health inequalities in Liverpool in 2012

Health inequalities between Liverpool and other areas and within the city are not a new phenomenon. Liverpool has had a long history of much poorer health than much of the country. This is perhaps not surprising given the industrial heritage of Liverpool and its history as a port gateway.

Wider determinants of health

The World Health Organization (WHO) Commission on Social Determinants of Health found that the interacting determinants of health reflect the social and economic inequalities of the conditions in which people are born, grow, live, work and age. The UK government asked Sir Michael Marmot to review health inequalities in England and to identify actions that would reduce them. This resulted in the Marmot Review which reported in February 2010.


The Marmot ‘principles’ for reducing health inequalities include using a lifecourse approach, addressing the settings in which people live, influencing economic conditions and ensuring that health equity is in all policy, at all levels of government. Inequities in health are systematic inequalities that can be considered as unfair or unjust.

Health equity approaches minimize inequities in health and in the key determinants of health. Reducing health inequalities is a matter of fairness and social justice. It requires evidence based participatory action by everyone addressing all the social determinants of health.

“Taking action to reduce inequalities in health does not require a separate health agenda, but action across the whole of society.”
Strategic approaches

Reducing health inequalities for improved population health outcomes is a matter of balancing action and impact. There is a social gradient in health, where lower social position results in worse health, and action on health inequalities needs to reduce that gradient. However, action only at the lower end will not reduce the gradient. Action will need to be focused at the lower end but applied on a reducing scale all the way up the gradient. This is called ‘proportionate universalism’, and should result in the health of the whole population ‘levelling up’ to that of the best.

The benefits of levelling the gradient are not only to individuals and communities who will be healthier and live longer, but to the economy as a whole by reducing the costs associated with ill-health such as welfare benefits and costs to the NHS.

Marmot proposes six policy objectives which will require concerted action to reduce health inequalities across the lifecourse.

- Give every child the best start in life
- Enable all children, young people and adults to maximise their capabilities and have control over their lives
- Create fair employment and good work for all
- Ensure a healthy standard of living for all
- Create and develop healthy and sustainable places and communities
- Strengthen the role and impact of ill-health prevention
Measuring levels of deprivation

The accepted way of measuring deprivation is using the index of multiple deprivation (IMD). This is a composite indicator of data on income, employment, health and disability, education skills and training, barriers to housing and services, environment and crime. This allows comparisons between areas and gives an overview of inequalities. Liverpool as a whole is identified as the most deprived local authority in England.

At smaller geographies the smallest area used is a Lower Super Output Area (LSOA) covering a population of approximately 1500 people. 51% of Liverpool’s 291 LSOAs are in the most deprived 10% in England - more than any other local authority in the UK. There has been some improvement in IMD between 2007 and 2010 with 60 of the city’s LSOAs having higher rankings and only 3 LSOAs ranking lower than previously.

Life expectancy

People in Liverpool are living longer than ever before. Boys born in the city today are expected to live nearly 3 years longer, and girls 2 years longer than if they had been born 10 years ago. Part of our challenge is to ensure that they are living longer in good health, rather than just surviving longer.

Yet significant inequalities remain between Liverpool and the rest of the country. Women in Liverpool have the 2nd worst life expectancy in England and Wales at 79.2 years (2008-10) and are expected to die 3.4 years younger than the national average of 82.6 years.

Men in Liverpool have the 5th worst life expectancy in England and Wales at 74.8 years (2008-10), and are expected to die 3.8 years younger than the national average of 78.6 years. There has been an improvement in ranking for male life expectancy which appears to be sustainable.

If Liverpool is compared to the London Borough of Kensington and Chelsea which consistently has the highest life expectancy in England and Wales, the life expectancy of both men and women is just over ten years lower for Liverpool residents. Similar inequalities still exist within Liverpool: the life expectancy gap across the city is 11 years for men and 8.1 years for women.
The correlation between the composite measure of socio-economic position shown by the IMD and the variation in life expectancy across Liverpool is apparent in the maps below.
Causes of death

The mortality rate for deaths from all causes for persons of all ages demonstrates the inequality between Liverpool and most of England. Liverpool local authority area ranks third worst with a rate of 752.7 deaths per 100,000 for 2008-10.

The rate for the North West is 630.1 per 100,000 and the rate for England is 553.3 per 100,000. The difference between Liverpool and England is therefore currently close to 200 deaths per 100,000.

Fig. 1 Directly Age Standardised Mortality Rate (1995-97 to 2008-10)

Infant deaths can also be an important indicator of inequality. Children from less affluent households are significantly more likely to die before their first birthday. The most recent data show that for 2008-2010, Liverpool had a rate of 5.2 deaths per 1,000 live births but this is not significantly different from the England average of 4.4 per 1,000.

Liverpool’s Directly Age Standardised Mortality Rate (2008-10) for cardiovascular disease for all persons under 75 years is 100.7 per 100,000 population, 49.6% higher than the English average of 67.3 per 100,000 (Figure 1). Over the last ten years in Liverpool there have been marked decreases in mortality rates for cardiovascular disease and the reduction has seen Liverpool’s rate move closer to the England average.
Liverpool’s Directly Age Standardised Mortality Rate (2008-10) for cancer for all persons under 75 years is 157.1 per 100,000 population, 42.71% higher than the English average of 110.1 per 100,000 (Figure 2).

Over the last ten years in Liverpool the mortality rate for cancer has reduced, but the decrease has been slower than the national rate. It will be an ongoing challenge to close the gap in the mortality rates with the rest of England as there is a clear association between the level of deprivation and the mortality rate. As in Figure 3 below.

It is likely that as Liverpool improves, less deprived areas will improve more rapidly, as the effects of the wider determinants of health over the past decade and more have an impact, such as better income, more education, resulting in better housing and other lifestyle choices etc.
Inequity and the wider determinants of health

Reducing health inequalities requires recognition of inequity and the responsibility of everyone to reduce it as far as possible by improving conditions at every stage of the lifecourse. It is important to understand that improvement will be gradual. The ideal environment for individual development cannot be created immediately, and we must continue to support the implementation of preventive interventions to enable lives to be as healthy as possible.

The Marmot Review lists the factors that make up the determinants of health as: material circumstances; the social environment; psychosocial factors; behaviours and biological factors. These are influenced by: early childhood development and education; employment and working conditions; housing and neighbourhood conditions; standards of living and freedom to participate in the benefits of society. Liverpool has challenges in many of these areas, although some progress is being made.

Education

Liverpool has raised educational attainment at GCSE level from low levels to close to the England average. The percentage of 5 A* to C grades at GCSE including English and Maths is currently 55% in Liverpool compared to 58.9% nationally. The attainment rate is high compared to places with similar levels of deprivation but there is still considerable variation across the city with higher achievement in more affluent areas.

Employment

Unemployment rates remain high in Liverpool with 6.8% of the population claiming Jobseeker’s Allowance in December 2011 compared to 3.9% for Great Britain, and total worklessness in Liverpool at 21.8% compared with 12.1% for Great Britain. In May 2011 12% were claiming incapacity benefit, nearly twice the Great Britain average of 6.5%. In 2008 over 16,000 people were claiming incapacity benefits due to mental illness, one of the highest levels nationally.
Housing

Liverpool has private rental rates that are significantly above the national average (15%) at 28.8%. Rates of fuel poverty and housing hazards are highest in the private rented sector. The social housing sector in Liverpool has 93.3% stock conforming to the decent homes standard. Private sector housing conditions in the city show significant improvement from 2006 to 2010 for both standards of fitness and performance against the decent homes standard.

The number of unfit dwellings has reduced by 18.1%. The number of non decent dwellings has reduced by 28.8%. The number of vulnerable households occupying non-decent homes has decreased by 33.9%. Liverpool has undertaken an Older Persons Housing Study to determine how to meet the housing needs for older people which include significant health and care needs and an expected increase in the proportion of older people in the population.

Child poverty

Child poverty is also a very important indicator and is discussed further in Chapter Four. One in three children in Liverpool are now living in poverty compared to one in five across England. These levels are expected to rise in the current economic climate.

Lifestyle behaviours

There are many behaviours that are risk factors for poor health throughout life. These include smoking tobacco, drinking alcohol to excess, lack of physical activity, unhealthy diet, and drug use. Many of these factors are correlated with deprivation. The reasons why individuals engage in unhealthy behaviours are complex and people often require support to change their lifestyles to improve their health.

Smoking rates across Liverpool have fallen dramatically since 2005, from a rate of 35% in 2005 to 25.9% in 2011. However, there are still inequalities across the city with rates in some wards being twice as high as in other more affluent wards. Reducing smoking in pregnancy, which can cause children to be born prematurely and suffer from more health problems in infancy, remains a particular challenge.
There is a strong correlation between those areas experiencing the highest economic disadvantage in the city, and those most affected by alcohol-related health harms which cannot be explained by the amounts of alcohol consumed alone. More affluent wards in the south of Liverpool have alcohol-related hospital admission rates equal to or slightly above the national average, while the most deprived wards have admission rates over three times the national average.

Liverpool has the highest rates of alcohol-related hospital admission in England for both adults and children. Liverpool residents are twice as likely to die from an alcohol-specific condition, such as liver disease, than the England average.

Obesity can cause high cholesterol, high blood pressure, increased insulin production, heart disease and stroke. Those who are overweight or obese are more likely to develop cancer and more likely to die from cancer. In Liverpool in 2010 22.6% of Year 6 boys and 19.7% of Year 6 girls measured through the National Child Measurement Programme were classed as obese. Estimates of adult obesity in Liverpool are about 20% which is similar to the national average. Obesity rates are strongly related to deprivation.

Mental health and wellbeing

The national mental health strategy ‘No health without mental health’ recognises three aspects involved in mental health inequality: inequalities that lead to poor mental health; inequalities that result from poor mental health such as lower employment rates, poorer housing, education and physical health; and inequalities in service provision, in access, experience and outcomes. Social inequality of all kinds contributes to poor mental health, and, in turn, poor mental health can result in further inequality.

An individual’s mental health is linked to their life experiences of family, friends, community and broader societal influences. These influences translate into either risk factors or protective factors for mental health. Early intervention is needed to stop poor mental health and common mental illnesses developing, particularly among children.
13.4% of the adult (18+) population of Liverpool has depression compared to the England average of 11.9%. Levels of dementia in Liverpool are not significantly different from the England average. The number of suicides on Merseyside among young men aged 15–35 has fallen by 55% between 1999-2009, bringing it below the average for the North West and the rest of England and Wales.

The Marmot principles provide a framework for maximisation of effort and resources in reducing inequality. They are also a positive approach to ensuring health equity and fairness in all policy although this will be more difficult in austerity conditions. The Liverpool Fairness Commission’s 2012 report ‘Come Together’ is expected to provide the impetus for the city to consider how to address some of the fundamental inequities in health determinants such as access to employment and equitable pay structures. This approach also accords with the priorities of the elected Mayor of Liverpool: to build schools and homes, create jobs, make Liverpool business and enterprise friendly and make the city greener, cleaner and healthier.

**Recommendations**

- The Marmot frameworks for tackling health inequalities are adopted in the city and delivery assured by the Health and Wellbeing Board.

- That the Health and Wellbeing Board recognise economic regeneration as a key driver for health improvement within the city.

- That the Health and Wellbeing Board ensure that action on inequalities is embedded in the core business of all partners.

**References**


5. Liverpool Fairness Commission - Come Together 2012 May
Chapter Four

Child poverty and health in Liverpool: a public health perspective

Health inequalities in childhood lead to health inequalities in adulthood. The amount of ill health in children and young people is directly related to levels of poverty so child poverty can have a life long impact.

Addressing child poverty is a matter of social justice. Children have a right to good health, and it is unfair that many children in Liverpool are deprived of a fair start in life, and are unable to fulfil their full potential, because of the circumstances into which they are born. It is possible to reduce child poverty and its consequences, by focusing on the early years of children’s lives in Liverpool. This will improve children’s lives now, and will lay the foundations for a healthier future in the city.

Addressing disadvantage in the early years is key to tackling some of the most costly health and social problems that we face in Liverpool, such as unemployment, adult chronic diseases, poor mental health, and drug addiction, all of which can be related to early disadvantage\textsuperscript{1,2}.

A report from the Joseph Rowntree Foundation estimated that the additional cost to public services of these consequences in the UK was between £11.6 and £20.7 billion in 2006/07. This means there is a strong economic case for improving the life chances of poor children in Liverpool\textsuperscript{3}.

Young children in Liverpool are particularly vulnerable to the effects of poverty, and they need to be prioritized when planning changes to services in Liverpool in the face of financial pressures. Child poverty levels are set to rise, and current budget cuts to local authorities are heaviest in the most deprived areas\textsuperscript{4}. The Institute for Fiscal studies show that children are being hit hardest by these changes\textsuperscript{5}.

What is child poverty, and how is it measured?

Children are said to live in poverty when they live in families which lack the resources to enable their children to participate effectively in ordinary patterns of living, meaning they may be excluded from many aspects of everyday life\textsuperscript{6}.

The 2010 Child Poverty Act details government responsibility to reduce child poverty and the aim of reducing it quickly and by high percentages.
One of the key targets is for relative poverty: proportion of children in households below 60 per cent of median income to be reduced to 10% by 2020. In practical terms, living on an income of less than 60% of the median means that many families will struggle to meet basic needs like food, heating, transport, clothing and the extra costs of education such as technology and school trips.

**Child poverty in Liverpool**

Liverpool has some of the highest levels of child poverty in the UK. Based upon the latest estimates, one in three children in Liverpool (34%) lives in poverty, compared to one in five children in England (20.9%). This is over 30,000 children.

There are five wards in Liverpool where more than half of the children are living in relative poverty: Princes Park (60%), Everton (55%), Kirkdale (54%), Picton (52%) and Riverside (51%).

![Fig 1 - Estimated percentage of children in poverty by Liverpool Ward Mid 2011](image)
Relative child poverty increased dramatically in the 70s and 80s, so that by 1990, about 1 in 3 children in the UK were living in relative poverty. Since 1990 this gradually fell to 20%, until rates started to rise again under the influence of the economic downturn, and the changes to the benefits system in England.

**How does child poverty affect health?**

The fact that disadvantage starts early and tends to accumulate over the course of people’s lives is key to understanding the links between child poverty and poor health. This is of particular concern for the first five years of life – the Foundation Years – because of the damaging and cumulative effects of early disadvantage.

A child’s physical, social, and cognitive development during the early years strongly influences their school-readiness, educational attainment, economic participation and health in later life. Growing up in poverty means that children are more likely to be exposed to a range of health-damaging factors, and less likely to be exposed to protective factors. The links between poverty and ill health go far beyond the immediate health effects of living in a family with a low income. As children’s lives unfold, the poor health associated with poverty limits their potential and development across a whole range of areas, leading to poor health and life chances in adulthood, which then has knock-on effects on future generations. This pathway, and some of the key drivers of poverty are illustrated in Figure 2 below.

![Fig 2 - Key Drivers of child and family poverty](image)
What are the effects of child poverty in Liverpool?

The Marmot report¹ and the Frank Field report on child poverty² are key documents that show how early disadvantage is associated with poor health and social outcomes across the course of people’s lives. In order to demonstrate the effects of child poverty in Liverpool, this section looks at low birth weight, childhood asthma, cognitive development and learning (measured by school readiness and GCSE exam success), and life expectancy.

**Fig 3 - Relationship between the percentage of children in poverty and Low Birth Weight in Liverpool**

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**Child poverty leads to poor health at birth: poor children in Liverpool are born too small**

Maternal poverty influences the development of the foetus during pregnancy, and affects child health outcomes from the start, most importantly birth weight. Low birth weight is associated with poor growth and cognitive development, and chronic diseases later in life, such as diabetes and high blood pressure.¹¹
Maternal smoking in pregnancy is one of the important avoidable causes of low birth weight. In a study of 40,000 women giving birth at the Liverpool Women’s hospital, smoking early in pregnancy was about six times more common in women living in the most deprived fifth of Liverpool compared to the least deprived, with increased rates of preterm birth and low birth weight\textsuperscript{13}. In the first few years of life children living in deprived areas are more likely to be exposed to passive smoking, and are less likely to be breastfed\textsuperscript{14}, illustrating how health-damaging factors begin to cluster and interact at an early stage.

*Child poverty leads to poor health in childhood: poor children in Liverpool are more likely to suffer from a range of physical and mental health problems*

Low birth weight, exposure to environmental smoke and lack of breast feeding are all associated with a higher risk of developing asthma, which is the most common chronic illness in childhood. Asthma admissions in Liverpool are closely related to levels of child poverty. The Millennium cohort study in the UK found that by the age of three children living in poverty were twice as likely to have asthma.\textsuperscript{11}

The association between poverty and poor health in the early years extends to many other physical conditions and threats to health, including limiting chronic illness, chronic ear infection, pneumonia, tooth decay, obesity, and accidents. These conditions reflect children’s exposure to poor living conditions, and other risk factors, such as poor diet.

Children growing up in poverty are also more likely to suffer a wide range of behavioural and emotional problems: child poverty is related to higher rates of Attention Deficit Hyperactivity Disorder, bedwetting and self-harm. The mechanism for these effects is not fully understood, but is likely to be related to the extra stress on families in poverty, which can also contribute to family instability and its consequences.

*Child poverty leads to poor learning in childhood and adolescence: thus poverty in Liverpool crucially affects children’s development and ability to learn*
The first years of life are crucial for brain development and provide the foundations for children’s capacities to learn. There is good evidence to show that if children fall behind in early cognitive development, they are more likely to fall further behind at subsequent educational stages.

Key influences on early development include parenting and the home environment, the level of parental education, and access to high quality pre-school care. ‘School Readiness’ is a routinely collected assessment of children’s development at the age of five, based on their behaviour and understanding. In order to be school ready, children should be able to share, self-motivate, co-operate and concentrate by the time they start school. This measure suggests that only 46% of children were properly prepared for learning at age five in Liverpool in 2010. The great concern is that many children are left behind at an early stage.

Educational trajectories track over the course of children’s lives, and within wards in Liverpool. The strength of the relationship between child poverty and GCSE success (5+ A-C grades) is striking (Figure 4). Learning disadvantage in childhood links with the adoption of health damaging behaviours such as smoking and impacts upon future employment and income in adulthood, which in turn have an effect on adult health. In a current study looking at health in deprived cities in the UK, one participant spoke about growing up in Liverpool:

‘Lots of kids don’t go to school, don’t learn any discipline, so don’t work. It’s been two or three generations since the war... people have gone downhill and there’s been a loss of hope. Kids and parents alike are bereft. It’s a structural problem.’
Child poverty reduces life expectancy in Liverpool: Children growing up in poor areas of Liverpool die earlier

Disadvantage in early life means that children who grow up in poverty are less likely to be in work, to live in a decent home, to earn a decent wage, and to report good health and wellbeing as adults.

Children who have grown up in poverty are more likely to face recurring poverty and other disadvantages harmful to their health as adults.

It is the accumulation of health damaging exposures over the course of people’s lives that explains the close relationship between levels of child poverty, and life expectancy at birth in Liverpool (Figure 5).
The challenge and rewards of addressing child poverty

Reducing child poverty and its impact, and so improving health in Liverpool is a huge challenge, and will require a number of overarching actions outlined in the key Marmot Review, ‘Doing Better for Families’ from the OECD, the Frank Field review on Child Poverty in the UK and the ‘Liverpool City Region Child Poverty and Life Chances Strategy’. The recommended actions are detailed below:

- **Reduce children’s exposure to poverty**

  Maximise household incomes, by helping people into employment - Provide affordable housing - Provide affordable, high quality child care - Provide affordable public transport - Help people in Liverpool manage debt

- **Reduce the consequences of poverty by focusing on child development in the early years. Sure Start centres should be a key focus for these efforts, and should become local community hubs:**

  Protect investment in the early years in the face of budget cuts - Provide high quality and consistent support and services for parents during pregnancy - Support families to achieve progressive improvements in early child development, by providing good quality early years education and childcare - Provide high quality home visiting services - Focus on narrowing the educational attainment gap at all stages

- **Prevent ill health causing poverty**

  Provide high quality children’s services according to need - Avoid the inverse care law

- **Improve the health of the poorest in order to provide a way out of poverty**

  Provide high quality maternity services - Promote breast feeding and smoking cessation - Focus on universal, evidence based services which are not stigmatising and which improve awareness of early development through the whole population
• Collect better data on children across Liverpool so that we can track progress

Develop indicators of early disadvantage at local levels that can be tracked over time, such as school readiness - Evaluate services for their effects on early disadvantage

A focus on child poverty will improve the health of all children in Liverpool, but will improve the health of the most disadvantaged most quickly and reduce health inequalities. Crucially, investing in children in Liverpool will lead to healthier adults in the future. A focus on policies to reduce child poverty, and to mitigate the consequences of child poverty will be both critical and cost-effective for population health in Liverpool.

Recommendations

• That the Health and Wellbeing Board recognises the contributory factors and impact of child poverty, and therefore ensures that all commissioning strategies use the evidence cited to mitigate the effects of child poverty.
References


4 Taylor-Robinson D. Bigger cuts to local authority budgets in the most deprived areas are likely to widen health inequalities. British Politics and Policy at LSE 2011.


16 Carlisle S. Three Cities Qualitative Research Project: Glasgow, Liverpool and Manchester. Report to Steering Group - September 2011


Chapter Five

Policy and Partnership

The Health and Social Care Act 2012 came into law in March 2012. The changes in roles and structures resulting from the legislation have been considerable and have affected all parts of the national, regional and local health, care and wellbeing systems.

The current economic downturn has highlighted the need for public services to become more financially sustainable and there is a strong requirement for the public sector to make year on year savings. At the same time, the economic situation has reduced income levels for many people, increasing inequalities and the level of the population in need. As the responsibility for population health and wellbeing is being locally devolved, a sustainable response to the redesign of the health systems can only be developed by local partners working together to maximise area resources and assets.

NHS, Social Care and Public Health Policy

The preceding White Paper ‘Equity and Excellence: Liberating the NHS’ outlined how the NHS is about fairness for everyone in society and the primary purpose of the NHS is to improve the outcomes of healthcare for all. The objectives of the reforms are to maintain and increase equity in access to healthcare and to achieve consistent excellence in all areas of the national health service. The NHS will be patient and carer centred and patients will be fully involved in their own care through decisions made in partnership with clinicians – ‘no decision about me without me’. It is intended that patients and carers will have more influence and choice in the system and the NHS will become more responsive to their needs. Information and the right support will ensure better outcomes for all. Professionals and providers will have more autonomy but also be more accountable to patients through choice, and to the public at a local level. Decision making will move as close as possible to individual patients through local clinicians commissioning services.

‘A vision for adult social care: Capable Communities and Active Citizens’ was published in November 2010 with the aim that people would be enabled to have greater control over their care and support. The principles by which this will be achieved include: empowered people and strong communities working together to maintain independence through prevention; individuals not institutions taking control of their care through
personalisation, including information and personal budgets; care and support delivered by all sectors and functions in partnership; sufficient provision to match the variety of people’s needs and; protection against the risk of abuse or neglect without the existence of risk being used as an excuse to limit people’s freedom.

The government’s strategy for public health in England ‘Healthy lives, healthy people’ was also published in November 2010 as the Government’s response to ‘Fair Society, Healthy Lives’, the Marmot Review of social determinants and health outlined in Chapter Three. The strategy states that the Government intends to take a coherent approach to the different stages of life and key transitions, instead of tackling individual risk factors in isolation.

The stages used to describe the lifecourse are: starting well and developing well - through early intervention and prevention aiming to give every child in every community the best start in life; working well - highlighting employer’s responsibilities to make positive health changes easier as champions of public health and; living and ageing well and sustainably - making healthy choices easier by adapting environments and making active ageing the norm.

Local authorities have a new duty to promote the health of their population, coordinating local efforts to protect the public’s health and ensuring health services promote population health. New opportunities will open up for community engagement and the development of holistic solutions for health and wellbeing utilising the full range of local services such as health, housing, leisure, planning, transport, employment and social care.

The Director of Public Health will be responsible for leading the local authority’s new public health functions, acting as principal adviser on health and championing health across the whole of the authority’s business. Local HealthWatch will provide advice and information about access and choice for local health and care services and embody a stronger voice for those who access them.

National Outcomes Frameworks for the NHS, Public Health and Adult Social Care have been developed to guide organisations towards achieving excellence.
Health 2020: Population health and wellbeing policy for Europe

The reform of the health systems in England was triggered by a change of government but was also a recognition of the need for sustainable public systems during economic crisis and future public health issues such as ageing population and effects of climate change. The member states of the WHO European Region have taken the opportunity to refocus efforts to improve population health and health systems through a new common policy framework ‘Health 2020’. Their aims are to “significantly improve the health and wellbeing of populations, reduce health inequalities, strengthen public health and ensure people-centred health systems that are universal, equitable, sustainable and of high quality.” The framework proposes a whole-of-government and whole-of-society approach where all levels and sectors of government are responsible for creating health and all of society including institutions, business and civil society are involved. This approach will inform Department of Health policy.

Delivering population health and wellbeing requires leadership – where public health is everybody’s business it can become nobody’s responsibility. Health 2020 emphasises the importance of delivery at local authority level through the leadership of local government and public health in partnership, achieved through the contributions of all sectors, communities and individuals. Liverpool is part of the WHO Europe Healthy Cities Network and Health 2020 informs the work of the network.

Delivery through local partnership: Health and Wellbeing Boards

Health and Wellbeing Boards (HWB) will aim for equity in access to health and wellbeing opportunities and excellence in all areas of the local health and wellbeing system, while the NHS will aim for equity in access to healthcare and excellence in healthcare delivery. Local leaders will shape their own approach to addressing local needs.

Health and Wellbeing Boards are established to promote integrated health and care services and increase accountability. They will bring together locally elected councillors, local clinicians as part of Clinical Commissioning Groups, Local HealthWatch and Directors of Adult Social Services, Children’s Services and Public Health to jointly assess local needs and develop an integrated strategy to address them.
Local leadership and wider responsibility across society is seen as the most effective way to improve everyone’s health and wellbeing, and address the wider factors that influence it.

**Liverpool Health and Wellbeing Board**

In developing the Health and Wellbeing Board, Liverpool is building on a legacy of excellent cross-sectoral partnerships and innovative approaches to improving health and reducing health inequalities. However, the city needs to seize this opportunity to shape the local health and wellbeing system to deliver sustainable healthy living for its population. The HWB is currently in shadow form and will continue to develop its structures and strategic processes. This will enable the sound relationships to develop which are needed to direct the ‘complex’ local health and wellbeing system. There has been successful joint working between different combinations of partners but now collaborative working is needed throughout the whole system. Engagement with the local population must be regarded as part of the system. There is also a need to work well with the other structures within and without the city such as the elected Mayor, the City Region, the Local Enterprise Partnership and local and regional Commissions.

The Shadow Liverpool Health and Wellbeing Board has agreed that it should:

- Provide local accountability for improved health and wellbeing and health equity outcomes for the population of Liverpool and ensure delivery of priorities identified within the Joint Health and Wellbeing Strategy.

- Provide the framework for partnership working between the local authority and clinical commissioning groups.

- Promote the joint commissioning and integrated provision between health, public health and social care, to improve health and wellbeing in the city.

- Lead on local public involvement and promote this through ensuring public involvement in the assessment of need and development of the joint health and wellbeing strategy.

- Improve local democratic accountability.
Programmes and investment must be consistent with local priorities which are derived from local needs and which build on local assets. Getting these right will ensure the capacity and capability to positively affect current and future lives. The diagram below shows the relationship between the elements of the commissioning cycle and the responsibilities of the HWB for strategic direction. Partners will be informed through the JSNA of the needs of the population and will have a clear and transparent process for making evidence based decisions on investment and action. There will be a clear process for measuring change and impact that can be used to review policy and action.

In order to make best use of the opportunities given by the HWB, it is planned to evaluate how it functions to assess its effectiveness.

The Joint Strategic Needs Assessment statement, the Health and Wellbeing Strategy and the Public Health Annual Report are all statutorily required reporting points in the strategic commissioning cycle. The design of the processes between each of these points will contribute to achieving maximum impact on health and wellbeing outcomes for the people of Liverpool over the coming years.

**Recommendations**

- That the Health and Wellbeing Board participate in an evaluation programme to demonstrate levels of effectiveness in improving outcomes for residents in Liverpool.

- That the Health and Wellbeing Board build upon the positive engagement of clinicians in developing the Health and Wellbeing Strategy to maintain active involvement in the strategic process.

- The performance measures selected from the national outcomes frameworks are reviewed annually.

- Building on the solid foundations of public health achievement at national and international level Liverpool should maintain and expand its profile as appropriate.
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1 Department of Health. Equity and Excellence: Liberating the NHS. 2010

2 Department of Health. A Vision for Adult Social Care: Capable communities and active citizens. 2010


Chapter Six

How partners contribute to improving public health outcomes

Improvements in population health and wellbeing are delivered through harnessing of the contributions across a breadth of organisations and workforce. While public health specialists provide evidence based advice on the policy, strategy and practice to achieve the best health and wellbeing outcomes for populations, it is the work done with communities, the services designed and delivered by many agencies and the health and care interactions with individuals that create population health and wellbeing.

This chapter gives brief descriptions of a small selection of the many activities that are improving health and reducing health inequalities, categorised by Marmot’s six policy objectives.

Give every child the best start in life

A social marketing campaign ‘Breastmilk…it’s amazing!’ was developed by Liverpool PCT, NHS Knowsley, NHS Sefton and NHS Wirral in response to the findings of a large scale consultation about infant feeding. The Breastfeeding Peer Support Scheme arranged volunteer support from local mothers who have breastfed their own babies and have completed a national qualification. Liverpool Women’s Hospital, Liverpool PCT, Edge Hill University and Liverpool John Moores University are all working towards UNICEF baby friendly accreditation.

The Family Nurse Partnership is a preventive programme offered to vulnerable young first time mothers delivered by specially trained nurses and midwives. Six nurses are working with two hundred families in Liverpool as part of a national pilot. A family nurse visits beginning in early pregnancy and continuing until the child is two years old. The programme has three major goals for families: to improve antenatal health, to improve child health and development, and to improve economic self-sufficiency.

The Liverpool Nursery Nutrition Programme was developed by social enterprise HM Partnerships to improve the food provision for children under five years in Liverpool. They reviewed existing practice, knowledge and provision in nurseries and then developed a nutrition training programme for nursery staff. A further training programme has been developed and offered to childminders.
Enable all children, young people and adults to maximise their capabilities and have control over their lives

The 'In Harmony', project has seen educational standards rise at Faith Primary School in West Everton. The catalyst for this has been the offer to learn a classical musical instrument, receiving up to seven hours of music tuition every week, during and after school time, from Royal Liverpool Philharmonic Orchestra musicians. The children have given a variety of public performances from as young as four years of age.

From Greenhouse to the Kitchen is a horticultural and catering course at HMP Liverpool. Staff at Liverpool prison worked with Liverpool PCT, Jobcentre Plus and Mercia Partnership (a learning and skills provider) to develop the scheme with a new kitchen and a greenhouse on prison land. Prisoners learn to both grow and cook healthy foods. The project aimed to reduce the risk of social exclusion after release by increasing employability through training for a catering qualification. The 12-week course has been very popular and has a high success rate including a local hospital offering kitchen work to several men who have completed the course.

During Liverpool’s Capital of Culture Year 2008, nearly 1000 active 08 volunteers participated and nearly 9000 became Cultural Ambassadors for the city and its culture programme during and following 2008. The Liverpool Schools’ Parliament offers an opportunity for young people to have a voice on matters of concern, including health and wellbeing, and be heard by decision makers. The Children in Care Council regularly gives feedback and raises issues affecting the city’s more than 900 children in care.

Create fair employment and good work for all

The Workplace Health Advice and Support Service is delivered by the Health @ Work charity through health advisors based in GP practices and Neighbourhood Health Centres. The preventive approach can help workers to avoid stopping work and moving onto ill-health benefits and helps employers provide supportive work environments to retain workers and enable a quick return to work. The service started working with Small and Medium Enterprises but found that many public sector workers were also seeking help to manage workplace health issues.
In May 2010 the Liverpool Workforce Wellbeing Charter was launched. The Charter provides employers with a clear and practical guide on how to make workplaces supportive and create a productive environment. It provides a set of wellbeing standards at three levels of accreditation and can be used by any organisation employing staff.

Mersey Care NHS mental health Trust offers the opportunity to register on a service users and carers involvement database. There are over 300 service users and carers registered and activities they can be involved in include providing training, improving information, participating in the appointment panels for all Trust staff, awarding contracts, research and inspection. These can provide useful experience and lead on to other opportunities.

Ensure a healthy standard of living for all

Can Cook is a social enterprise created to give people a healthier, home-cooked food experience and to inspire them to cook more at home. Can Cook works with schools, community and youth organisations to create positive attitudes to food and cooking. The Can Cook Pop Up Studio is a unique and innovative way of delivering healthier messages in workplaces, communities, schools, city centre spaces and events. The Can Cook Café opened in the new Garston Treatment Centre in April 2011.

The ‘Go ON It’s liverpool’ campaign has seen over 1,000 digital champions recruited since October 2011 to encourage internet use. Local people sign up as digital champions and support a friend, family member, neighbour, colleague or customer who are either offline, or not confident online, to help them develop their skills and reduce the digital divide. In the last six months of 2011 the number of people offline in Liverpool reduced from 104,000 to 84,000 which was almost a six percent reduction in the number of people classed as ‘digitally excluded’ in Liverpool, compared to just 1.1 percent nationally in the same time.

The Income maximisation Project (IMP) is a city-wide project developed by the Citizens Advice Bureau, Liverpool Social Services and Mersey Care (NHS) Trust responding to research findings that people with poor mental health have a high failure rate in accessing their benefit entitlement. The project provides advice, information and representation for people with severe mental health problems referred from health and care services. The caseworkers help with identifying benefits
and resolving debt issues such as mortgage and rent arrears, fuel and water bills and other consumer debt.

**Create and develop healthy and sustainable places and communities**

Merseyside Fire and Rescue Service objective is to make Merseyside a safer, stronger, healthier community. There is a recognised relationship between fire risk and deprivation. Firefighters visit homes to carry out home fire safety checks in order to prevent fires starting in the first place. More than forty Advocates work within their local communities, working with vulnerable people who are more likely to die in a fire due to factors including old age, mobility, sensory difficulties, communication barriers and chaotic lifestyle. Six Advocates have trained as Health Trainers. Community Fire Stations are used as bases for activities such as outreach gyms to help promote rehabilitation after ill health, smoking cessation group meetings, exercise programmes for children and young people and a market garden where local children grow fruit and vegetables. Merseyside Fire and Rescue service was used as an example of good practice by the Marmot Review.

The Disarm partnership set up the first CitySafe Havens scheme outside of London assisted by the Youth Advisory Board of Positive Futures North Liverpool. Thirty-five shops, community centres and hospitals in Anfield, County, Kirkdale and Everton were selected as public places that could be used as a refuge for people feeling vulnerable or intimidated. The premises were made secure and fitted with automatic locking systems and staff undertook child protection training. Since the launch of the programme in January 2011 crime has reduced within 50 metres of each safe place, knife crime has fallen by nearly one quarter and there has been a decrease of 47 per cent in criminal damage.

Eight NHS Trusts in Merseyside are the first in the country to work together to save energy and reduce waste while saving up to £4 million each year. Each Trust has a Carbon Reduction Plan accredited by the Carbon Trust and actions include re-designing heating and power for a hospital and the installation of software which automatically shuts down computers at the end of the day. The Trusts will soon be campaigning for their 50,000 workers to make a difference individually in reducing energy usage and waste.
The Mersey Forest produced the Liverpool Green Infrastructure Strategy, mapping all the vegetation and open water in and around the city and their potential uses and contributions to health and wellbeing. The Natural Choices for Health and Wellbeing Grants scheme was developed in partnership by Mersey Forest and Liverpool PCT to support Liverpool projects that help to improve wellbeing by achieving as many of the Five Ways to Wellbeing as possible and make use of the natural environment to help deliver them. Projects funded range from food growing to forest schools and increasing site access to creation of wildlife trails and new garden areas.

2010 was declared the Year of Health & Wellbeing with wide ranging activities at both city and community level and across the wider city region. These included arts, culture and health as a legacy to 2008 European Capital of Culture. The New Economics Foundation ‘5 Ways to Wellbeing’– Connect, Give, Be Active, Take Notice and Keep Learning were adopted as central to the promotion of simple messages on how to incorporate activities into daily routines to support and maintain wellbeing. Following the success of 2010, Liverpool agreed that the activity would be extended to a Decade of Health and Wellbeing 2020, working in partnership to make Liverpool more Equal, Well and Green by 2020.

**Strengthen the role and impact of ill-health prevention**

The Liveability programme is a nurse-led service available to all Liverpool residents aged 50 and over. The Liveability Team provide a free 6 week Active Ageing Programme for people over 50 years to improve health and mental fitness, increase energy levels and help make participants feel better about life. A home assessment takes a holistic view of how the older person can stay active, healthy and independent in their own home for longer. Gym sessions are run at the Lifestyles Austin Rawlinson Centre with twenty older people volunteering to motivate others.

The campaign against living miserably (CALM) is a campaign and charity targeting young men with a free helpline, magazine and online community to reduce the high suicide rate amongst men under 35. CALMzones (in London and Merseyside) are areas where CALM works in partnership with local authorities allowing local CALMzone Coordinators to work with local clubs, community, music and entertainment industries to promote the campaign to young men and provide them with local as well as national information.
Liverpool Football Club’s Action for Health programme is aimed at improving health awareness in North Liverpool and delivers a range of community projects. The ‘Half Time Score’ healthy lifestyle programme delivered in partnership with Age Concern is for those 50 and over with the emphasis on ‘more to play for in the second half!’ During the 6 week programme participants get the chance to try a range of activities from aerobics and computers to cycling and healthy eating with information sessions based on the Five Ways to Wellbeing.

Everton Football Club’s charity, Everton in the Community, runs an exercise programme, Inside Right, for ex-service personnel who are at risk of developing mental health problems or are at risk of becoming isolated once they have returned to civilian life. The programme not only promotes physical activity but also the chance to gain football coaching qualifications as well as wider training courses. The project also aims to harness the feel-good factor of playing football by creating opportunities to volunteer and compete in leagues and competitions.

Ways of Working and the Workforce

Given that the contribution of all sectors to improving public health outcomes can and must be recognised, there is still a need to measure that contribution so that decisions which are the most effective investments can be made. There is currently no one recognised way of measuring activity across so many functions in comparable units. The most promising approaches at present seem to be a categorisation by return on investment such as Triple Bottom Line (TBL) or Social Return on Investment (SROI), or units of life time such as Disability Adjusted Life Years (DALY) and Disability Free Life Expectancy (DFLE). All such approaches have problems in that their value classifications have to be negotiated before they can be used.

At a minimum, the local health economy needs to be systematic about recording estimated contributions as there is likely to be considerable double counting without carefully following resource pathways. There needs to be an ‘asset based audit’ of existing and planned activity across the sectors: third sector; business and private sector; Universities; NHS Trusts; research partnerships, foundations or centres and; geographical, interest and issue communities.
The Health and Wellbeing Board will also need to be able to demonstrate how working together better through partnerships can add value to its strategic activity. The initial focus of the Health and Wellbeing Strategy process (described more fully in Chapter Eight) will provide an environment to explore this.

In January 2012 the NHS Future Forum published its recommendations following its consultation on the NHS’s role in the public's health:

- The NHS must do more to prevent poor health, so it can reduce health inequalities and continue to provide high quality care for future generations.

- Every healthcare professional should make every contact count – use every contact with the public to help them improve their health. This should be a core staff responsibility in the NHS Constitution.

- The NHS must do more to support the wellbeing of its own staff too, helping a workforce of 1.4 million to live healthily and spread healthy messages with family, friends and patients.

The NHS and the local authority are the two largest local employers, and their workforces most often interact with people who may be receptive to making small or large changes that will result in better experience of life for themselves and others. The ‘every contact counts’ approach could be applied locally to the entire local authority workforce. Under the direction of the Health and Wellbeing Board the NHS and local authorities could be encouraged to develop a health and wellbeing system to enhance the health and wellbeing of all employees.
**Recommendations**

- Review commissioning plans of partner organisations in the Health and Wellbeing Board to maximise the contribution to public health outcomes.

- Undertake an asset based audit of existing and planned activity across the sector, to systematise the measurement of outcomes and inform future commissioning approaches through the Health and Wellbeing Board.

**References**

Chapter Seven

How Public Health programmes contribute to improving health outcomes

The Shadow Liverpool Health and Wellbeing Board (HWB) is developing its governance structures and work programme. As part of the reporting structure, a number of sub groups have been established to take the public health agenda forward.

The sub-committee for ‘Health Improvement and Better Lifestyles’ will oversee the main public health programmes as well as the new responsibilities that have been given to the local authority such as workforce wellbeing and dental public health.

This current public health investment has been continuously informed by the JSNA process and is intended to achieve the high level outcomes of health improvement and reducing health inequalities. These outcomes align with the National Outcomes Frameworks. As the HWB shapes its strategic process for population health and wellbeing improvement, the sub-committee will monitor the contribution of the programmes through the Board’s Performance Management Framework. This chapter describes the activity and impact of some of those current public health programmes.

Health improvement

Health Trainers

The Health Trainer and Community Health Ambassador Team (CHAT) are commissioned to provide support to individuals and groups across the city.

Health Trainers work with individuals who want to make a lifestyle behaviour change such as improving their diet, reducing alcohol intake, stopping smoking or increasing levels of exercise. They take individuals through an evidence based process of behaviour change, providing motivation, support and signposting to specialist services.

The majority of referrals (over 70%) come from primary care and over 60 GP surgeries now have a named Health Trainer attached to their practice. When analysing health plans developed against goals achieved, it appears that those referred from primary care are more prepared for behaviour change and more likely to fulfil the goals in their health plan.
By May 2012, almost 6000 people had been referred into the service since it began. Over 80% of those referred developed a personal health plan focusing on the aspects of their life they most wish to change. Since September 2011 there has been an increase in the numbers of people aged 45 and over accessing the service and it is likely that this increase is primarily due to the introduction of the primary care based Health Checks programme.

The Health Trainer service is now integrated into a number of care pathways for example, the local non-medical weight management scheme, Exercise for Health and the Pro Active Care pilot in Anfield.

The Community Health Ambassadors Team (CHAT) work with groups of people and organise events to promote healthier lifestyles. They also refer people to other services for support, including Health Trainers. The service is complementary to Health Trainers in so much as it provides social support and group based activity work for those individuals who do not wish to access one to one support.

**Healthy Homes**

Healthy Homes Programme (HHP) is an award winning partnership delivered by the City Council and funded by the Primary Care Trust. It facilitates the improvement of housing conditions, and also engages residents from priority neighbourhoods into mainstream health and wellbeing related services, reducing health inequalities.

A high percentage of private rented housing increases the probability of households under financial pressure and possibly fuel poverty. The houses may also not be well maintained, with poor insulation and damp, meaning that heat is wasted. In Liverpool, 60% of the properties in the ward with the lowest life expectancy are private rented housing compared with only 0.3% private rented in the ward which has the longest life expectancy.

Neighbourhoods are prioritised and proactively visited by a team of Healthy Homes Advocates. Every property in a targeted area is visited by an advocate and the residents and their homes are surveyed to identify health and housing needs. The advocate can provide access to a wide range of health and wellbeing related organisations from Children’s Centres to Fag Ends, and for services from benefit entitlement checks to home fire safety checks.
To ensure partners act upon the referrals, the advocate re-contacts the resident at a later date. Poor housing conditions are dealt with by a dedicated team of specialist Environmental Health Officers who are able to use enforcement powers to require landlords to effect repairs on grounds of health and safety.

Since the programme commenced in April 2009, the team has carried out over 21,000 initial assessments in priority neighbourhoods. Over 14,000 health and wellbeing surveys have been carried out at homes occupied by 32,000 residents. Over 18,000 referrals to partners have been made:

The Environmental Health team have inspected over 3,500 properties, identifying serious housing hazards which are likely to cause the occupier harm. This includes hazards that could cause accidents such as electrics, fire, carbon monoxide, hot surfaces and failing elements, serious fall hazards and damp and mould.
Health hazards in housing and their potential health effects include:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Health impact of housing hazard</th>
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<tbody>
<tr>
<td>Excess cold</td>
<td>Cardiovascular conditions, respiratory diseases, rheumatoid arthritis, hypothermia</td>
</tr>
<tr>
<td>Fire</td>
<td>Inhalation of smoke/fumes (mild to fatal), burns</td>
</tr>
<tr>
<td>Falls</td>
<td>Physical injury (cuts, swellings, fractures, death), deterioration in general health for elderly</td>
</tr>
<tr>
<td>Damp and Mould</td>
<td>Respiratory disease, allergic symptoms, infections, depression and anxiety</td>
</tr>
<tr>
<td>Hygiene</td>
<td>Gastro-intestinal disease, asthma and allergic rhinitis, emotional distress, depression and anxiety</td>
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Liaising with landlords to effect property improvements, and resorting to enforcement action where necessary, the team have generated an estimated £3.7 million of investment in improvements by property owners. The Building Research Establishment estimate that through the removal of housing hazards, this unique Liverpool programme could save the NHS up to £22 million over ten years and the wider societal benefit could total £55 million.

Working with partners, HHP also promotes Carbon Monoxide Awareness, Winter Survival and awareness of accidents in and around the home. Advice about surviving the winter and information about how to access the service was sent with the regular flu immunisation letter to 76,000 of the City’s most vulnerable residents in 2011, and literature on reducing accidents in the home has been sent with Council tax bills to 230,000 homes.

Healthy Homes staff regularly visit GP surgeries to offer the service to patients. Any health professional is able to refer clients directly to Healthy Homes for assistance for example, when a patient is admitted to hospital. A new initiative to refer vulnerable patients directly into the programme is also being developed. Alerts can be added to the records of patients deemed to be vulnerable to sub-standard housing, allowing faster referrals to be made. This system is now being rolled out to all participating GPs. The programme is also working with Registered Providers around the ‘Whole System Partnership’ to provide temporary accommodation for vulnerable residents in unsuitable accommodation to reduce hospital admissions and reduce delayed discharges.
A Health Impact Assessment (HIA) is being undertaken of the Healthy Homes Programme to assess which of the wider determinants of health it is likely to improve. The areas identified are:

- Social Isolation – loss of identity, independence and feeling of powerless, quality of life and self-esteem;
- Mental health – across all themes of the impact assessment;
- Education – choice, skills to access other services and facilities and lower life expectancy;
- Health literacy – choice, empowerment, decision making and low uptake of preventive services and reduced compliance with treatment, potential increased hospital admissions;
- Overcrowding – sleep problems, respiratory diseases, impact on educational attainment and social networks;
- Environment (internal and external) - social relationships, days of school lost, behavioural problems, depression, stress.

The Programme aims to address these issues through a combination of the Programme elements and partners’ interventions. A detailed analysis is now being completed to identify any gaps which will inform further programme development.

The NHS Health Check Programme in Liverpool

From April 2013 the NHS Health Check Programme will become the responsibility of the City Council. This service complements the existing local initiatives of Health Trainers and Healthy Homes with these services promoting take up.

The NHS Health Check programme supports the prevention of heart disease, stroke, diabetes and kidney disease. Everyone between the ages of 40 and 74, who has not already been diagnosed with one of these conditions, will be invited (once every five years) to have a check to assess their risk of developing them, and will be given support and advice to help them reduce or manage that risk. Early identification and intervention should result in improved health outcomes for those identified.
Primary care was the most effective preventive setting for the Liverpool NHS Health Check programme and it was launched in November 2010. The programme is delivered via a General Practice Locally Enhanced Service (LES), whereby practices are commissioned at an agreed rate for each health check they perform. Since 2010 uptake to the programme has been increasing, with large numbers of the population invited and attending for assessment. In 2011/2012, of the 82,591 individuals who were invited to undergo a health check, 27,006 (33%) underwent an assessment.

Liverpool has identified a higher proportion of people with some medical conditions than expected from the national modelling (as at Quarter 4 2011/12). There were higher than predicted numbers for statin prescription (705), diabetes diagnosis (163), hypertension diagnosis (670) and referrals to smoking cessation services (529). Referrals to weight loss programmes (270) and diagnoses of chronic kidney disease (165) were fewer than predicted.

Overall, these figures demonstrate that the model for delivery of the NHS Health Check Programme in Liverpool is proving to be effective in identifying and managing risk for the eligible population.

**Better lifestyles**

**Smoke free**

Smoking prevalence has reduced in Liverpool from 35% in 2005 to 25.9% in 2011. An estimated 8.1% of males and 12.7% of females in Liverpool aged 15 and 16 smoke. Although Liverpool would prefer all its young people to be non-smokers, this is encouraging as recent estimates for England suggest that 15% of 15 year olds smoke regularly (National Centre for Social Research, 2010). There remains an urgent need to protect children from secondhand smoke. Overall smoking costs the NHS in Liverpool approximately £12.7 million and kills around 1000 people each year.

Liverpool has a systematic approach to tobacco control within the city. It is built on cooperation between the Local Authority, National Health Service (through commissioning and quality criteria), third sector organisations and private contractors who provide and promote the stop smoking service. Smoke Free Liverpool was formed to address the significant health inequalities attributed to smoking and secondhand smoke.
This unique partnership, Co-Chaired by a Cabinet Member from the Local Authority and the Chairman of Liverpool Primary Care Trust, works to a local strategy signed off by the Leader of the Council and the jointly appointed Director of Public Health.

As far back as 1998, the White Paper, ‘Smoking Kills’\textsuperscript{3} emphasised the importance of using both behavioural and pharmaceutical interventions for helping people to stop smoking. Smokers are four times more likely to stop smoking with NHS Stop Smoking Support Services than if they try independently.\textsuperscript{4} Smoking cessation interventions are effective in the short-term and a proportion will remain not smoking; in Liverpool, nearly half of clients setting quit dates remain abstinent at four weeks and Liverpool PCT has consistently exceeded its ‘four week quit’ targets. Services are provided through Fag Ends, as well as pharmacies and support through primary care and hospitals. Liverpool Stop Smoking Service had a very successful year, with a total of 5769 people using the service to stop smoking, 2593 more than the previous year. All areas of the service reported an increase in activity suggesting that the stop smoking social marketing campaigns have been successful.

Liverpool’s approach to reducing smoking in young people has been tackled methodically. It provides young people with stop smoking support, and resources have been directed at de-normalising and de-glamourising smoking. D-MYST, Liverpool’s youth advocacy group to reduce smoking, lobbies locally and nationally on smoking related issues that concern young people and undertakes smoking prevention initiatives in schools. They are currently lobbying the UK communications regulator (Ofcom) regarding smoking in television programmes shown before the 9pm watershed. Liverpool Healthy Schools team and the city’s schools are extremely supportive of tobacco control programmes including participation in a European youth smoking prevention research project, smoking cessation delivered in schools and targeted project work with primary school children.

There is good evidence of the effectiveness of clinical staff in giving brief advice and interventions to increase the likelihood of stopping smoking, and for pharmacy led interventions supporting this. As well as stop smoking services, enforcement services are provided to remove illegal and illicit tobacco from Liverpool. Located within Liverpool City Council’s trading standards department, the Alcohol and Tobacco Unit focuses entirely on consumer protection issues concerning alcohol and tobacco. This unit is seen as an example of best practice.
It regularly conducts exercises to test for underage sales of tobacco and investigate intelligence reports regarding the sale of illicit products such as counterfeit tobacco. When breaches of legislation are discovered the Alcohol and Tobacco Unit takes enforcement action through the courts and secures prosecution and fines. Tobacco control within the city remains a priority despite the difficult economic climate.

**Alcohol-related harm**

Alcohol is a widely available source of pleasure but it is increasingly becoming a significant cause of personal, social and economic harm. Alcohol plays an important role in the British economy and in society, and is a strong factor in city centre night time economies. However, alcohol contributes to health problems such as liver and heart disease, and some cancers, as well as social problems including unemployment, homelessness, violence, teenage pregnancy and accidents.

Harm associated with alcohol use also impacts on others, whether feeling unsafe near bars and clubs, having to cover for a colleague who fails to turn up for work, or serious effects such as domestic violence or road traffic accidents. Alcohol can also have a particularly negative social impact on young people and misuse can contribute to a failure to reach full social and economic potential. The scale of the cost of alcohol harm in Liverpool suggests that urgent action is needed to rebalance the City's drinking culture. The cost of dealing with the negative impacts of alcohol amounts to more than £228 million per year in Liverpool or an average of £512 for every Liverpool resident. These avoidable costs reduce available funding for front line services that could instead, benefit every Liverpool resident.

A report commissioned by North West Employers and Drink Wise North West on behalf of Local Authorities in the North West region set out the cost factors of alcohol to our society (2010/11 values adjusted using HM Treasury deflators). Direct costs include: costs to the NHS; crime and licensing costs; workforce and wider economic costs and costs to Social Services. There are also indirect costs such as the increased costs attached to street cleaning services. Alcohol related costs to the NHS include hospital activity, A&E emergency visits, GP consultations and the prescription of specialist drugs. The average cost of alcohol to the NHS in Liverpool annually is estimated at £103 per person or £46.08 million for the city. Crime and licensing costs include alcohol related and alcohol specific crimes, the issuing of penalty notices for disorder and
the costs incurred by licensing authorities and licensees. Costs for Liverpool are estimated at £76.75 million, approximately one third higher than the North West and England levels.

The productivity of the workforce is a key component in helping to ensure economic growth and prosperity, especially necessary during times of austerity and lost productivity due to alcohol is a major economic problem. Costs from lost output due to absenteeism, reduced employment and premature death overall are estimated at £90.03 million for Liverpool.

The North West issues more prescriptions for alcohol dependence than anywhere else in England at almost 23,000 per year. Heavy drinking impacts on the quality of people’s lives and relationships and social services are often at the frontline of dealing with the many repercussions of alcohol misuse. The cost to social services in children and family services and substance misuse services for adults is estimated at £15.49 million for Liverpool. The third Liverpool Alcohol Strategy 2011-2014 describes a number of services and initiatives that are being maintained or developed to address alcohol harm:

- A programme of alcohol Identification and Brief Advice (IBA) to screen and engage the population across a range of settings has been developed with ambitious targets for delivery of IBA during the life of the Strategy.
- A new Community Alcohol Service has been designed to increase the capacity of alcohol services to work with people whose alcohol use is harmful to their health. When it reaches capacity, the service will increase the numbers of harmful drinkers that can be treated and prevented from becoming more serious cases by over 2000 patients per year.
- A new brand called ‘What’s Yours?’ has been developed to inform the public about the relationship between alcohol consumption and physical health risks. The ‘What’s Yours’ brand is targeted at 35-55 year olds who are most at risk of developing one of 44 health conditions, including liver cirrhosis, hypertension and gastro-intestinal and breast cancers as a result of excessive drinking.
- Research has been undertaken on the environmental factors that contribute to violent crime and alcohol related disorder in the City Centre’s night time economy.
With an annual overall cost to the Liverpool economy of over £228 million, demonstrating the impact that alcohol misuse has upon Liverpool reinforces that addressing alcohol misuse is, and must remain, a priority for cross sector action, in order to reduce the burden on individuals and services.

**Sexual health**

Appropriate, accessible sexual health services are important in reducing health inequality, as the effects of unplanned pregnancies and some sexually transmitted infections can be long term. Liverpool sexual health services have developed incrementally, with a strong third sector presence. The strategic approach for comprehensive provision in the city is to continue to address issues of access, duplication and fragmentation while improving and increasing the range of services offered. Analytical modelling has shown that demand for community contraceptive clinics has fallen, while those specifically for young people and those offering testing for sexually transmitted infection have grown. A consultation process has begun on provision of contraceptive and sexual health services in the city which would enable longer opening hours and offer a range of services in single locations with improved access where there is most need. Specific community services for HIV and for young people are also proposed.

There is a clear relationship between teenage pregnancy, sexual ill health, poverty and social exclusion. Women, gay men, young people and black and minority ethnic groups are most affected and there is a further correlation with deprivation. Young people under 25 are one of the vulnerable groups expected to benefit from new service arrangements.

Young people are more likely to engage in risky sexual behaviour from lack of knowledge, not having the confidence to say what they want (for example, refusing unprotected sex) and after using alcohol or drugs. Liverpool aims to reduce the incidence of STIs, under eighteen conceptions and repeat terminations in the under 25 population through improved education and one to one interventions in primary care emphasising advance planning for contraception such as considering Long Acting Contraceptive Devices and having condoms available. Contraception services save the NHS over £2.5 billion each year.

There have been improvements in sexual health in Liverpool but further advances are needed. Teenage pregnancy rates in the city have fallen by 23.1% between 1998 and 2010 but the
Liverpool rate of 44.5 per 1000 under-18 conceptions is still high compared with the rate for England of 35.4 per 1000. Termination rates for young women aged under 18 years and repeat terminations in women aged under 25 years are higher than national rates. Sexually transmitted infection rates are still high and the numbers of people living with HIV in the city continue to rise.

**Liverpool Active City**

Physical inactivity has been identified as the fourth leading risk factor for global mortality causing an estimated 3.2 million deaths before overweight and obesity which is ranked as the fifth leading risk with 2.8 million deaths. Active living benefits health at any age, but it is especially important to the healthy development of children and young people, and can make a substantial difference to the wellbeing of older people.

Physical activity improves the health and fitness levels of individuals by contributing to a lower risk of cardiovascular diseases including coronary heart disease and stroke, high blood pressure, adverse blood lipid profiles and insulin resistance. Physical activity helps to maintain a healthy weight and reduces the risk of type 2 diabetes. Musculoskeletal health improves through increasing bone mineral density and reducing the risk of osteoporosis, and decreases the risk of lower back pain. Physical activity is also associated with a reduction in the overall risk of cancer. The most active individuals have a 40-50 percent lower risk of developing colon cancer than the least active. Regular physical activity further contributes to the improvement of psychological wellbeing and mental health by reducing depression, improving mood and reducing stress as well as improving self esteem.

Over the last five years Liverpool has seen an above national average increase in participation in physical activity. Residents are more aware of physical activity opportunities in the city. Volunteer capacity has increased and partnerships have developed to help deliver dedicated and innovative activities and events across the city, which has benefited communities and individuals across the lifecourse. Despite the increases in participation and volunteering, research shows that approximately 80% of the population of Liverpool are still not active enough to benefit their health.
Liverpool Active City continues to make every effort to encourage Liverpool residents to realise the benefits of physical exercise despite the difficulties in resourcing activities in the current economic situation. The Futures scheme gives free or discounted access to under 17s in the city’s Lifestyle Leisure Centres for activities including swimming, badminton, and the use of facilities for team sports. The Exercise for Health scheme where people are referred from primary care has continued in Lifestyle Leisure Centres and Community Sports Centres. In 2011 evening and weekend sessions were made available to allow more people to access the scheme.

In the run-up to the 2012 Olympics a Festival of Olympic Sports was staged at the Liverpool Echo Arena and a day of taster sports activities was held when the Olympic Torch relay reached the city. Participation events have included the Merseyside School Games, the Festival of Health and Physical Activity, the Liverpool Triathlon and the Liverpool Marathon. The Ping! Liverpool Table Tennis Festival saw table tennis tables offering free play placed in public locations across the city for a month. Liverpool has also hosted international netball, youth football, tennis and the group displays of the British Ministrada Gymnastics Festival.

Liverpool Active City aims to help sectors and organisations recognise the benefits of encouraging people to integrate physical activity into their daily routines and embed health and wellbeing into their long-reaching plans on issues such as transport, education, training, employment and improving lifestyle choices. The implementation of the Liverpool Active City Strategy for 2012-2017 will encourage and support the least active people in Liverpool to build some activity into their everyday lives. Many of these opportunities, such as walking and cycling, are free or low cost to access which is an important consideration.

The aim of the strategy is to achieve a year on year increase of two percent of the population who are physically active and to ensure that every individual has the opportunity to engage at a level that will enable them to meet their potential. This will be achieved by action including maximising city structures (healthy schools, sport and recreation services, early years, active ageing, primary care, transport) to mobilise communities to take action to promote physical activity and ensuring that the places where we live, learn, work, play and shop encourage physical activity.
**Recommendations**

- The Health and Wellbeing Board recognises the impact on health from a range of programmes delivered in partnership across the city.

- The Health and Wellbeing Board directs investment to maximise improvement in health outcomes through delivery of evidence-based programme activity which is aligned with the needs identified in the JSNA.

**References**

8. WHO. Global Recommendations on Physical Activity for Health. 2011
Chapter Eight

Liverpool’s Health and Wellbeing Strategy

The Joint Strategic Needs Assessment (JSNA) for Liverpool has shown that there are many areas of need that, if resolved, would result in improved health and reduced health inequalities. The public health programmes described in Chapter Seven are contributing to improved health outcomes in the areas of need which they address.

The Liverpool Shadow Health and Wellbeing Board has made the decision to initially prioritise four significant areas of work and focus the Health and Wellbeing Strategy (HWS) process on activity relating to these areas which are: Child Poverty, Alcohol, Cancer and Mental Health. All four strands will take an overall ‘think family’ approach to strategic action. As the Health and Wellbeing Board develops its structures and processes, the HWS process will develop to address wider issues for improved health outcomes for the city through the integration of partner aims and resources. Liverpool City Council, Liverpool CCG and other partners have all been actively involved in the development of the strategy.

Child poverty

It is clear from the account of child poverty in Chapter Four that it has great impact on the health and wellbeing of children and families, both while they are experiencing it and cumulatively across the lifecourse.

Liverpool Children’s Trust have undertaken to lead cross-sector work for the HWS on reducing child poverty and its consequences and their actions will form part of the updated Children’s Plan for the city. There are two focus areas: reconfiguration of Children’s Centres so they act as economic development hubs and; school readiness assessment and wellbeing measures.

Planned action to support the development of Children’s Centres includes: mapping financial management, worklessness and learning and skills provision across all sectors and; maximising child care provision. Action on school readiness includes: reviewing wellbeing measures for children and how child and adult wellbeing measures may be integrated into a family ‘readiness’ assessment.
This work will contribute to the two main aims of the 2011 strategy of the Liverpool City Region Child Poverty and Life Chances Commission: to ensure the best possible start in life for children and young people to improve their life chances and; to maximise family income1. The proposed actions for this strand of the HWS also reflect the overarching actions to address child poverty from national and international strategy listed in Chapter Four.

Alcohol

Addressing health outcomes related to alcohol has been an area of work that has had strong cross-sectoral support in Liverpool. While alcohol plays an important role in the British economy, it is becoming a significant cause of personal, social and economic harm. Excessive alcohol use is a major cause of disease and injury, accounting worldwide for 9.2% of disability-adjusted life years. The link between alcohol consumption and health inequalities is evident with alcohol-related death rates up to 45% higher in areas of deprivation.

Local analysis of alcohol consumption in Liverpool2 highlighted the following issues:

- Alcohol is the biggest contributory factor for violent offences as recorded by Merseyside Police
- Alcohol reduces the life expectancy of Liverpool males by 14.8 months and females by 7.6 months
- Liverpool residents are twice as likely to die from an alcohol-specific condition, such as Chronic Liver Disease, than the England average
Alcohol misuse is described in categories of Lower Risk, Increasing Risk, Higher Risk and Binge Drinking.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>Lower Risk</td>
<td>sensible drinking - men should not regularly drink more than 3-4 units of alcohol per day, and women should not regularly drink more than 2-3 units of alcohol per day</td>
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<tr>
<td>Increasing Risk</td>
<td>males drinking 22 - 50 units per week, females drinking 15 - 35 units per week</td>
</tr>
<tr>
<td>Higher Risk</td>
<td>males drinking more than 50 units per week, females drinking more than 35 units per week</td>
</tr>
<tr>
<td>Binge drinking</td>
<td>males drinking more than 8 units and females drinking more than 6 units on the heaviest day of drinking in the previous seven days</td>
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</table>

(1 unit = 8g or 10ml alcohol)

Using self-reported data (known to under-estimate consumption) from The Liverpool Lifestyles Survey (2007), aligned with modelled analysis from the North West Public Health Observatory, an estimated 41,586 males and 45,216 females would be classified as at increasing risk of alcohol related harm, and an estimated 24,750 males and 18,772 females would be classified as higher risk drinkers.
Chronic Liver Disease (CLD) is classified as an alcohol-specific condition, and can be viewed as a sensitive marker of ill-health within the population, as a result of alcohol misuse. Analysis of deaths from Chronic Liver Disease (CLD) in Liverpool and regional, national and Core City comparators (Figure 1), illustrates that Liverpool’s mortality rate, at 26.48 per 100,00 population, is significantly higher than the North West rate (19.79 per 100,000), England (13.71 per 100,00) and those of Birmingham, Leeds, Bristol and Sheffield.

A failure to tackle the impact of alcohol misuse in Liverpool will result in increased ill-health, inequality and costs. It is vital that we act in partnership with a range of stakeholders, as the effects of alcohol misuse extend much further than those relating to health care services.

The Liverpool Alcohol Strategy for 2011-2014, ‘Reducing Harm Improving Care’ has three overarching strands: Prevention, Treatment and Control and five high level objectives: changing knowledge, skills and attitudes towards alcohol; create safer drinking environments; supporting individual needs; support for children, young people and parents in need and; reducing the availability and affordability of alcohol. The lead responsibility for work on alcohol for the HWS has been undertaken by Public Health, and it was agreed that this strand of the strategy process would tackle an area that would
contribute to the aims of the Liverpool Alcohol Strategy but was not currently prioritised and that had scope for innovative approaches.

The focus of the HWS, primarily supporting the fourth objective of the Alcohol Strategy, will be on maternal alcohol consumption before pregnancy, during and after pregnancy. Three action areas will be taken forward: improved guidance and education; improved identification and screening and; improved access to alcohol services. Planned action includes: developing educational support and guidance for professionals and front line staff; implementing a standardised approach to screening tools and; engaging families in co-production of service re-design.

**Cancer**

Almost one-third of deaths in Liverpool are due to cancer, making it the most common cause of death. The incidence rate (new cases) of all cancers is significantly higher than the national rate and has increased at twice the national rate over the last decade. Approximately 2500 Liverpool residents are diagnosed with cancer each year, 438 more than would be the case if the local incidence rate equalled the national average. The incidence rate for lung cancer in Liverpool remains at twice the national average despite falling at a similar rate over the last decade. The local incidence rates for breast and prostate cancers are increasing at a faster rate than the national averages.

The three most common cancers for men in Liverpool are lung (20.3% of new cases), prostate (18.7%), and large bowel (13.3%). For women, the top three cancers are breast (25.8% of new cases), lung (18.9) and bowel (9.2%). In addition the incidence of all skin cancers has rapidly increased in Europe over the last two decades.

To narrow the cancer incidence and mortality gaps between Liverpool and the rest of England it is essential to prevent more cancers developing in the first place. This can be achieved through lifestyle prevention programmes and by ensuring they are diagnosed at an earlier stage through screening programmes and increased public awareness of symptoms of the most common cancers. Up to half of all cancers could be prevented by changes in lifestyle behaviours.

The lead responsibility for work on reducing levels of cancer for the HWS has been undertaken by Liverpool Clinical Commissioning Group, and it was agreed that the three
action areas would be: smoking (lung cancer); Human Papillomavirus (HPV) vaccine uptake (cervical cancer) and; skin cancer. Smoking is the major preventable risk factor for cancer. Dissuading people from starting to smoke and helping people to quit remain critical. HPV vaccination is an important way of protecting against cervical cancer and the vaccine is currently given to girls aged 12 to 13. Skin cancer is caused by overexposure to ultra violet rays and is largely preventable. Using sun beds can increase the risk by 75% and Liverpool has very high levels of sun bed use, including high use by teenagers.

Planned strategic action on smoking includes: implementing a programme of consistent interventions to be delivered earlier in schools to reach the primary school population and; reviewing and integrating the capacities of stop smoking services. Action on HPV includes: developing an integrated plan to identify and vaccinate those who have missed one or more doses and; identifying and meeting the training needs of school nurses and relevant others. Action on skin cancer includes: working with training providers for the beauty sector to give public health information and; reviewing the use of local legislation to address the risks posed to health by such a high concentration of sunbed premises in the city.

**Mental health**

Good mental health has been defined as: ‘A dynamic state, in which the individual is able to develop their potential, work productively and creatively, build strong and positive relationships with others, and contribute to their community. It is enhanced when an individual is able to fulfil their personal and social goals and achieve a sense of purpose in society’.

Public Mental Health is concerned with the mental health of the whole population and sub-populations which can be seen as a spectrum. National estimates suggest that about one fifth of the population have a diagnosed mental illness and about one fifth are ‘flourishing’, - they have good mental health, enthusiasm for life and are socially engaged.
Around one tenth of the population are described as ‘languishing’ - they do not have a diagnosable mental illness but their mental health is poor and they are struggling to cope. People in this group have an increased risk for both physical health conditions such as cardio-vascular disease and common mental illness such as depression. Prevalence of those described as ‘languishing’ seems to be high and continuing to rise among young people.

A small improvement in population level mental health should result in a decrease in the number of people in both the ‘languishing’ and mental illness tail of the distribution curve and an increase in the number of individuals crossing the threshold to become ‘flourishing’ (Figure 2).

![Psychological Resources](image)

**Fig. 2** The effect of shifting the mean of the Mental Health Spectrum

A population level survey of mental health across the North West of England found that 30.2% of Liverpool’s population experience poor mental health, compared to only 16.8% of the population across the North West. Only 5.7% of the local population enjoy good mental health, compared to 20.4% of the population across the North West.

Public Mental Health aims to prevent poor mental health and the onset of mental illness through community based interventions that reduce the impact of risk factors and to promote and protect good mental health through enhancing the effects of protective factors.

The most significant impediment to good mental health is poverty and the multiple deprivations and disadvantages that are associated with it. Factors that promote and protect good
mental health are those which increase the social, life and coping skills of individuals, provide social support as a buffer against adverse life events, and improve access to community resources and public services. Protective factors and good mental health also increase resilience, defined as ‘mechanisms that protect people against the psychological risks associated with adversity’. Therefore an emphasis on measures to ensure the population maximises its mental health rather than simply focusing only on treating or preventing mental illness, will have the overall effect of reducing levels of poor mental health and mental illness amongst the population.

The lead responsibility for work on more people achieving and maintaining good mental health for the HWS has been undertaken by Adult Social Care, and it has been agreed that the three action areas will be: practical and social prevention; improving access to psychological therapies and; integrated perinatal/post natal mental health provision.

A large proportion of Liverpool people who have mental health problems have their condition managed in primary care and the action areas reflect a new model of primary mental health care that aims to improve prevention, recovery and social inclusion outcomes, and help manage demand. The model will deliver practical, social and psychological help as well as joint work on care pathways by primary and secondary care. Planned action on practical and social prevention includes: identifying vulnerable families and developing checks to ensure prevention/recovery options have been considered for members and; improving coordination of support to get people into work and stay in work, including carers.

Action on improving access to psychological therapies includes: identifying access to psychological therapies for children and developing care pathways through transition to adult services and; reviewing referral and care pathways between mental health services, and drug and alcohol services. Action on integrated perinatal/post natal mental health includes: reviewing commissioning across child, adult mental health and maternity services.
Selection of future priorities

In order have the greatest impact on health inequalities and improving health outcomes it is necessary to choose the right areas on which to focus the resources. The Health and Wellbeing Board will need to agree how these priorities will be selected so that robust decisions will be made within the timescales of the commissioning cycle.

Recommendations

- That the Health and Wellbeing Board agrees the process by which future priorities are identified in alignment with the strategic cycle.

References


2 Drinkwise. The Cost of Alcohol to the North West Economy (Part A). 2012

3 Liverpool Public Health Intelligence Team. Liverpool Lifestyles Survey 2007. 2007


## Progress on recommendations from the 2010–2011 Annual Report of the Joint Director of Public Health

### Health Improvement – Children

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Update</th>
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<tbody>
<tr>
<td>1. The Children’s and Young People’s Joint Strategic Needs Assessment is used to inform the commissioning and design of children’s services.</td>
<td>The JSNA has been used with the City Region’s ‘Child Poverty and Life Chances’ strategy to create the strategic plan for the development of children’s services and so will inform what is commissioned.</td>
</tr>
<tr>
<td>2. Commission services that improve access for all young people to gain advice, education and support on sexual health and development of positive relationships.</td>
<td>Liverpool PCT’s commissioned services offer group work and one to one sessions for young people to learn about and discuss sexual health, in schools, colleges, youth clubs and specialist services. The clinics are now seeing an average of 140 young people per month. In 2011-12, over 4000 contacts were made with young people through Bitesize Brook and the outreach service.</td>
</tr>
<tr>
<td>3. The Children’s Trust will review measures of child wellbeing to identify or consider developing a suitable tool for use in Liverpool.</td>
<td>This action is to be taken forward through the Health and Wellbeing Strategy within the Child Poverty strand.</td>
</tr>
<tr>
<td>4. Agencies and organisations across the city will continue to work together to commission and provide services to maintain healthy weight in children across the age ranges, and to reduce obesity levels</td>
<td>Partnership working is a key feature of work in Liverpool to maintain healthy weight across the age ranges. Multi-agency interventions continue to support a reduction in obesity levels through a range of healthy eating and physical activity activities.</td>
</tr>
<tr>
<td>5. The PCT and LCC with partners will take forward the development and implementation of a new Teenage Pregnancy Strategy to reduce teenage conceptions and support teenage parents.</td>
<td>Development of the teenage pregnancy strategy is on hold as structures change, however the teenage pregnancy board and operational group continue to meet to ensure teenage parents have the support they need</td>
</tr>
<tr>
<td>6. Smoke Free Liverpool will develop and implement a Young Person’s Tobacco Strategy that aims to reduce the uptake of smoking among young people, and support young smokers to stop.</td>
<td>Liverpool PCT support a young people’s lobbying and campaigning group, DMyst. who have recently focussed on plain packaging and have made a contribution to the UK consultation by getting local schools involved. In addition, we commission a young person's service through our stop smoking service provider.</td>
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<tr>
<td>7. Oral health improvement programmes reviewed annually to confirm they are delivering expected impacts or to consider the evidence for changing commissioned services.</td>
<td>Reviews of how some programmes are delivering impacts are underway and may lead to changes in the commissioning of these services.</td>
</tr>
<tr>
<td>8. The development of the new specification for health visiting and Family Nurse Partnership should aim to achieve the maximum benefit for the long term health of the mothers and children.</td>
<td>Liverpool has a new specification and is an early implementation site for a new model of health visiting. The new specification has drawn on the learning from a range of good practice and research evidence including the family nurse partnership.</td>
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### Health Improvement – Green Spaces and Sustainable Development

<table>
<thead>
<tr>
<th>Recommendations</th>
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<tbody>
<tr>
<td><strong>1</strong> Health and Wellbeing board to adopt the Green Infrastructure Strategy as a key means of engaging partners in the city to improve health.</td>
<td>The objectives of the Green Infrastructure Strategy for improved health and wellbeing form part of the Core Strategy of the Local Development Framework for Liverpool.</td>
</tr>
<tr>
<td><strong>2</strong> Ensure integration of green space priorities within the Joint Health and Wellbeing Strategy to support the delivery of reductions in health inequality within the city.</td>
<td>Priorities are identified through the JSNA process and inform the HWS process.</td>
</tr>
<tr>
<td><strong>3</strong> Health care services to be encouraged to adopt use of green spaces as part of therapeutic interventions.</td>
<td>Discussions with Alder Hey around ‘Children’s Health Park’ and other Trusts regarding use of green spaces in new build health facilities.</td>
</tr>
<tr>
<td><strong>4</strong> Health and Wellbeing board to encourage the use by communities of green space through existing and future commissioned programmes of health improvement interventions.</td>
<td>A Green Space programme has supported the implementation of Liverpool’s Green Infrastructure Strategy. Community grants provided support to community organisations to use or improve green space to improve health and wellbeing. Merseyforest was funded to deliver a ‘capacity building’ programme to support organisations.</td>
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### Health Improvement – Older People

<table>
<thead>
<tr>
<th>Recommendations</th>
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<tbody>
<tr>
<td><strong>1</strong> A whole system falls service review should be commissioned through the JSNA process during 2011/12.</td>
<td>Further work is being carried out to identify where a more focused service review should be applied. This will be linked with the development of the falls prevention programme mentioned below.</td>
</tr>
<tr>
<td><strong>2</strong> An integrated Falls Prevention programme in the three re-ablement hubs across the city should be commissioned for 2012/13.</td>
<td>There is a programme of new building and refurbishment being carried out in the three hubs. This will facilitate the development of the falls prevention programme.</td>
</tr>
<tr>
<td><strong>3</strong> Improve the early and accurate diagnosis of dementia</td>
<td>Planned activity for Year of Action on Dementia 2013</td>
</tr>
<tr>
<td><strong>4</strong> Key priorities for Older People should be identified through the JSNA process to inform the development of the Joint Health and Wellbeing Strategy.</td>
<td>Priorities are identified through the JSNA process and inform the HWS process. Wider initiatives such as Age Friendly Cities are being reviewed for good practice implementation.</td>
</tr>
<tr>
<td><strong>5</strong> Joint Commissioners to develop evidence for how well carers are supported.</td>
<td>The carer self-assessment programme has been re-launched and is being publicised through carer organisations and GP’s. This includes an assessment of health and wellbeing. As a result of this assessment, a carer’s support plan is developed and implemented then reviewed on an annual basis.</td>
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## Health Protection

<table>
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<th>Recommendations</th>
<th>Update</th>
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<tbody>
<tr>
<td><strong>Flu</strong></td>
<td></td>
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<tr>
<td>1. Improve communication and awareness-raising through development of a plan</td>
<td>NHS Merseyside developed a communications plan for the flu campaign,</td>
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<tr>
<td>well in advance of flu season, taking a social marketing approach and ensuring</td>
<td>ensuring a systematic roll out of flu communications and social</td>
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<tr>
<td>awareness-raising initiatives are systematically rolled out.</td>
<td>marketing.</td>
</tr>
<tr>
<td>2. Awareness-raising and vaccination planning by all providers needs to take</td>
<td>The number of people vaccinated against flu increased again during last</td>
</tr>
<tr>
<td>into account that the majority of flu vaccination needs to happen during</td>
<td>winters campaign, with the majority of vaccination taking place in</td>
</tr>
<tr>
<td>October so that people at risk are protected before flu is circulating.</td>
<td>October.</td>
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<tr>
<td>3. Much greater focus is needed on protecting pregnant women with a vital role</td>
<td>Collaborative work with local maternity units has been successful and</td>
</tr>
<tr>
<td>to play by both maternity services and primary care. Informing and encouraging</td>
<td>more pregnant women will be able to receive the flu vaccination from</td>
</tr>
<tr>
<td>pregnant women to take up flu vaccination needs to become a routine element of</td>
<td>their midwife in the coming flu season.</td>
</tr>
<tr>
<td>antenatal care.</td>
<td></td>
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<tr>
<td>4. Flu vaccination uptake needs to improve across practices with less variation</td>
<td>Work is underway with GP practices to address the variation in uptake</td>
</tr>
<tr>
<td>between practices. Greater sharing of good practice across practices is</td>
<td>across the city.</td>
</tr>
<tr>
<td>needed.</td>
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<tr>
<td>5. Specific targeted work is needed to understand and address variation in</td>
<td>Work is underway to address the variation in uptake across clinical</td>
</tr>
<tr>
<td>uptake between different clinical risk groups.</td>
<td>groups.</td>
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<tr>
<td>6. All NHS Trusts need to plan to deliver against targets for flu vaccination</td>
<td>All trusts increased staff flu vaccination uptake with the majority of</td>
</tr>
<tr>
<td>of health care workers agreed in contracts for 2011/12.</td>
<td>vaccinations taking being done before the end of November. Targets have</td>
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<td></td>
<td>been updated and agreed for inclusion into 2012/13 contracts.</td>
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<tr>
<td><strong>MMR</strong></td>
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<tr>
<td>7. Develop a childhood vaccination strategy for 2011 and beyond, based on</td>
<td>Vaccination rates in Liverpool are at the highest levels ever.</td>
</tr>
<tr>
<td>understanding of local need and inequalities in immunisation uptake</td>
<td>Vaccination for all children is encouraged through a targeted approach</td>
</tr>
<tr>
<td></td>
<td>by Liverpool Community Health and GP practices.</td>
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<tr>
<td>8. Immunisation needs to be recognised as the responsibility of all health</td>
<td>The increase in uptake for childhood immunisations is facilitated by</td>
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<tr>
<td>workers and all those working with children in different settings, through</td>
<td>partnership work between community health staff and Children’s Centres.</td>
</tr>
<tr>
<td>building immunisation checks and opportunities for vaccination or</td>
<td>Families in some areas are now able to visit their local Children’s</td>
</tr>
<tr>
<td>signposting into all contacts with health and other services.</td>
<td>Centre for children to be vaccinated, and there are plans to expand this</td>
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<td></td>
<td>initiative to cover a wider area.</td>
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<tr>
<td>9. Review and improve adolescent vaccination delivery systems.</td>
<td>The approach taken to adolescent vaccination has been reviewed and in</td>
</tr>
<tr>
<td></td>
<td>order to improve vaccination uptake rates, the scheduling of</td>
</tr>
<tr>
<td></td>
<td>vaccinations has been revised.</td>
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</tbody>
</table>
### TB

**10** Build on work with TB Alert and partners in NHS, Local Authority and Third Sector to embed TB awareness raising so that TB cases are identified early.

Public health have worked with TB Alert, a national charity that aims to promote awareness of TB. Training sessions took place for staff from third sector organisations, local authority and NHS to raise awareness of groups that are at increased risk of TB. PH is also working with Asylum link, a local charity, to provide information about TB and other health issues to their service users directly.

### Hep C

**11** Improve prevention and access to hepatitis C treatment and care for those at increased risk including prisoners and drug users.

Access to hepatitis C screening and treatment for prisoners has been greatly improved by the launch of an outreach clinic: specialist nurses visit local prisons and work with prison healthcare staff to diagnose and treat people with hepatitis C. A Mersey wide hepatitis C strategy is being developed which aims to improve prevention, diagnosis and treatment services for those at increased risk of the disease.

### STI / HIV

**12** Easy access to STI and HIV testing and treatment in community settings

Continued encouragement for general practice to offer STI and HIV testing and treatment. Consultation in progress with patients and key stakeholders regarding modernising sexual health services, and plan to offer increased opportunities for testing and treatment in community settings.

**13** Targeted testing for those most at risk in line with national guidance

A Merseyside HIV Strategy Group has been formed which is auditing testing in community settings to ensure it meets recommendations.

**14** Prevention messages to be given at all available opportunities.

All community sexual health services are expected to promote positive sexual health and well-being messages at all consultations.

**15** HIV health needs assessment to inform service commissioning.

The health needs assessment has been completed and will be used to inform service specifications.

### HCAI

**16** To commission a publicity campaign to increase understanding of how infections are caught and how best people can protect themselves through simple measures such as hand washing.

There has been a further significant fall in HCAIs (MRSA and C difficile) across the city due to joint working between hospitals around infection prevention. Strong public engagement reinforces messages and people are provided with the information to be able to prevent infection themselves, where possible. Liverpool infection prevention and control team continue to support the city’s care homes, doctors’ and dental practices, optometry and pharmacy outlets through audit, training and advice. The team works with home care providers to promote the safety of people in their own homes.
### Recommendations

#### Dental

| 17 | To ensure that current standards are maintained and monitored by practices through an audit programme. | Practices are required to carry out programme audits and this is monitored as part of the supervision process. |
| 18 | To work with practices to identify solutions where there may be practical difficulties (specifically ‘estates’ issues) which may prevent them progressing towards ‘best practice’ standard. | Work has been carried out across the city and more detailed work is being supported with 5 practices with more significant issues. |

#### Air Quality

| 19 | Monitor progress of air quality action plan | Actions recommended within the Liverpool City Council Air Quality Action Plan are at various stages of implementation and an update on the actions was provided to Defra in February 2012. |
| 20 | Ensure robust communication of effects of air pollution on health to policy makers and to public. | Information on Air Quality, the levels of air pollution within Liverpool and their effect on the public are communicated via the Council Air Quality web pages. The Liverpool City Council educational web site is now in its second and final stage of development. |
| 21 | Continue to encourage the move from cars to cleaner forms of transport, including walking, cycling and buses. | Quality bus partnerships have been introduced on two major bus routes into the city so cleaner buses will be used on these routes; their impact on air quality is being monitored. 25% increase in cycling between 2006 & 2011. Merseyside Walk to School Campaign showed 45% increase in children walking to school (participating schools) Oct 2011. |

#### Health Care – Cardiovascular disease

| 1 | Health impact assessment should be commissioned to assess the effects (both positive and negative) of local legislation aimed at reducing the risk of CVD. | With Public health moving to be part of the Liverpool City Council there are new links being developed which will facilitate the use of health impact assessments to ensure the benefits are maximised and the harms mitigated. |
| 2 | Funding for CVD programmes should be prioritised to ensure their potential is realised. CVD Programmes need to be funded for a minimum of 5 years to maximise their impact. | CVD has been, and will continue to be a long term priority in Liverpool. The emphasis on improving the delivery of CVD programmes in Primary Care is part of longer term planning for Liverpool CCG. |
| 3 | The NHS Health Check programme should be robustly evaluated to ensure uptake from those populations known to be most at risk. | The data from the Health Checks programme is regularly monitored and the level of uptake assessed. Liverpool is also participating in a national assessment of the programme. |
| 4 | For those with established disease, demonstrate reduced variation in care across different health centres and raised standards of care provided. | The CCG is working with practices to reduce the variation in care by use of the GP specification. There has been a demonstrable improvement in care in some places. |
## Health Care – Cancer

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Update</th>
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<tbody>
<tr>
<td>1 Commission smoking cessation programmes targeting those groups and</td>
<td>Liverpool Stop Smoking services are offered from 60 locations throughout the city. Roy Castle Fag Ends and community pharmacies are commissioned to offer services in the areas where prevalence is highest. Uptake is reviewed with service providers to ensure services are in the right place at the right time. The workplace service targets the occupations that have the highest smoking rates, such as routine and manual jobs.</td>
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<td>neighbourhoods with the highest prevalence rates.</td>
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<tr>
<td>2 Increase uptake of bowel and cervical screening programmes using social</td>
<td>Insight work completed for cervical screening—social marketing campaign to start in 2012/13. bowel screening campaign has now been rolled out nationally, complemented by local campaigns—waiting for national evaluation.</td>
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<td>marketing techniques.</td>
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<td>3 Evaluate the effectiveness of social marketing campaigns to increase</td>
<td>Locally the campaigns resulted in a 19.1% increase for early presentations for possible bowel cancer and 9.3% for increase in early presentations with possible symptoms of lung cancer.</td>
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<tr>
<td>awareness of the early symptoms and signs of cancer and increase early</td>
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<tr>
<td>presentation.</td>
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<td>4 Monitor the number and yield of two week wait cancer referrals, identify</td>
<td>Working with a project manager from Merseyside and Cheshire Cancer Network identifying and supporting these practices currently.</td>
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<td>and work with those in areas with low yield.</td>
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<tr>
<td>5 Increase the proportion of newly diagnosed cancers with a recorded stage at</td>
<td>All providers now have new data system installed so expecting to meet targets for stage recording during 2012/13.</td>
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<td>diagnosis to 70%.</td>
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A statistical appendix to the 2011-12 PHAR is available at: www.liverpoolpct.nhs.uk
Translation available on request

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